AMENDMENTS TO THE CLAIMS

1.   (Currently Amended) A humidifying device for humidifying a gas, with the water vapor contained in air, comprising:

a hollow fiber bundle formed by bundling a plurality of hollow fibers permeable by water vapor, the hollow fibers having an inner diameter of approximately 400 μm and an outer diameter of approximately 500 μm, and being orientated in a direction of a predetermined axis;

a housing having an accommodating space for accommodating the hollow fiber bundle therein, and having an introduction port for the gas to be humidified, communicating to bores of the hollow fibers, a discharging port for the gas to be humidified, communicating to the bores of the hollow fibers, an air inlet communicating to a space in the housing external of the hollow fibers to introduce atmospheric air, and an air exit communicating to the space in the housing external of the hollow fibers; and

blowing means arranged at the air inlet of the housing for introducing the atmospheric air into the housing,

wherein a ratio between a sum of cross-sectional areas of the hollow fibers taken along a plane perpendicular to the axis, and an air passage cross-sectional area, is set within a range from 0.1 to 0.7, the air passage cross-sectional area being obtained by subtracting the sum of cross-sectional areas of the hollow fibers from a cross-sectional area of the space of the housing taken along a plane perpendicular to the axis.

2.   (Original) A humidifying device as defined by claim 1, wherein the ratio of the cross-sectional areas is set within a range from 0.2 to 0.6.

3.   (Original) A humidifying device as defined by claim 1, wherein the hollow fiber is comprised of a polyimide membrane or a polyether-imide membrane.

4.   (Original) A humidifying device as defined by claim 1, further comprising:

a humidity sensor provided at the discharging port for detecting the humidity of the gas to be humidified; and

a control section for controlling the blowing means to make the humidity of the gas to be humidified, as detected by the humidity sensor, equal to a predetermined value.

5.   (Original) A humidifying device as defined by claim 1, wherein the gas to be humidified is an oxygen-concentrated gas.

6.   (Canceled)

7.   (Currently Amended) A humidifying device for humidifying a gas, with the water vapor contained in air, comprising:

a plurality of hollow fiber bundles respectively formed by bundling a plurality of hollow fibers permeable by water vapor, the hollow fibers having an inner diameter of approximately 400 µm and an outer diameter of approximately 500 µm, and being orientated in a direction of a predetermined axis,

wherein each of the hollow fiber bundles includes 50 to 1,000 of hollow fibers;

a housing having an accommodating space for accommodating the plurality of hollow fiber bundles, and having an introduction port for the gas to be humidified, communicating to bores of the hollow fibers of the respective hollow fiber bundles, a discharging port for the gas to be humidified, communicating to bores of the hollow fibers of the respective hollow fiber bundles, an air inlet communicating to a space in the housing external of the hollow fibers to introduce atmospheric air, and an air exit communicating to the space in the housing external of the hollow fibers; and

blowing means arranged at the air inlet of the housing for introducing the atmospheric air into the housing.

8.   (Original) A humidifying device as defined by claim 7, wherein the hollow fiber is comprised of a polyimide membrane or a polyether-imide membrane.

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9.   (Canceled)

10.   (Original) A humidifying device as defined by claim 7, further comprising:

a humidity sensor provided at the discharging port for detecting the humidity of the gas to be humidified; and

a control section for controlling the blowing means to make the humidity of the gas to be humidified, detected by the humidity sensor, equal to a predetermined value.

11.   (Original) A humidifying device as defined by claim 7, wherein the gas to be humidified is an oxygen-concentrated gas.

12.   (Canceled)